

REMARKS

The present application was filed on January 26, 2004, with a priority date of July 27, 2000. Originally-filed claims 2 and 3 have been canceled without prejudice and independent claim 1 remains pending.

Claim 1 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,034,653 (hereinafter “Robertson”) in view of U.S. Patent No. 6,452,572 (hereinafter “Fan”).

Claim 1 includes a limitation directed to a opaque light shield slidable along a length of an exterior wall of the housing of a compact head mounted virtual image display unit. In the arrangement recited in claim 1, the image signal may be viewed by the user with the light shield in both an open and a closed positions; the only difference is in the amount of background light which enters the optical system while the image signal is being viewed by the user. In the open position, the image signal is viewed by the user together with background light entering the optical system, and in the closed position, the image signal is viewed by the user with background light blocked from entering the optical system and thereby eliminated.

In formulating the present rejection of claim 1, the Examiner concedes that Robertson fails to teach an opaque light shield as recited in claim 1. Indeed, Robertson discloses an interface pod that is transmissive or see-through and hence has no light shield. See Robertson at col. 8, lines 10-25.

The Examiner instead alleges that Fan discloses an opaque light shield at column 23, lines 40-46. Applicants respectfully submit that, rather than disclosing a light shield, the relied-upon portion of Fan discloses a “protective shade 1102 [that] can be raised or lowered to protect the display panel 1000, the viewing lens 1150 and other internal components from damage.”

Rather than having a closed position wherein an image signal is viewed by the user with background light blocked from entering the optical system and thereby eliminated, as recited in claim 1, this protective shade that completely covers a display in a display housing when closed, such that when the protective shade in Fan is in the closed position, anything displayed in the optical system cannot be seen. See Fan, col. 23, lines 40-46, and FIG. 54. In other words, the protective shade taught by Fan is functionally similar to a conventional camera lens cap, in that the protective shade is

operative to protect the lens and other internal components from damage when the device is not in use, but must remain open when the device is in use, as any aspiring photographer will quickly learn.

Not only do Robertson and Fan fail to teach or suggest the slidable opaque light shield recited in claim 1, but both references teach away therefrom. Applicants note that the Supreme Court has held that “when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.” *KSR Intern. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1740, 82 USPQ2d 1385, 1395 (U.S., 2007) (citing *United States v. Adams*, 383 U.S. 39, 50-51, 148 USPQ 479 (1966)).

Robertson at column 7, lines 45-55, with reference to FIG. 14, describes a display wherein a shutter (indicated by reference numeral 310 in FIG. 14), which may be used “to filter or substantially prevent or occlude distractions to the non-participatory eye of the viewer looking through display device 10,” and which “be open allowing light and other distractions to the non-participatory eye or partially or completely closed to filter out light or such distractions.” (both with emphasis added)

The slidable opaque light shield recited in claim 1 is slidably positioned with respect to the optical system such that, in the open position, the image signal is viewed by the user together with background light entering the optical system, and in the closed position, the image signal is viewed by the user with background light blocked from entering the optical system. By contrast, the position of the shutter taught by Robertson has no effect on the amount of background light entering the display pod. Indeed, the shutter and the display pod are positioned in front of different eyes. See FIG. 14; see also Robertson at column 8, lines 4-9.

Moreover, in the Office Action at page 3, last paragraph, the Examiner contends that it would have been obvious to have modified the alleged teachings of Fan directed to “the opaque light shield being provided on the front-end of the optical system (i.e., the end closest to the user’s eye) . . . such that a slidable opaque light shield was provided . . . at the back-end of the optical system (i.e., the end farthest from the user’s eye).”

Applicants respectfully disagree and instead submit that Fan teaches directly by teaching embodiments which expressly exclude such modifications. For example, Fan at column 6, lines 38-40, specifies that the end of the display farthest from the user’s eye, which Fan calls the “front

section 10 is preferably formed from an opaque material such as plastic to block external light 99 from the user's eye's [sic]." Fan at column 8, lines 55-59, discloses that in "another preferred embodiment backlight is provided by direct ambient light 99 [t]hrough a light transmissive front housing section 10."

As such, rather than teaching or suggesting the use of any light shield, Fan in fact discloses an alternative arrangement wherein the amount of background light permitted to enter a display is regulated by altering the material from which a front housing section is formed. Robertson likewise teaches away from the claimed arrangement by teaching the use of a shutter to regulate the amount of background light permitted to enter the non-participatory eye (i.e., the eye other than that over which the display is mounted), rather than the amount of light permitted to enter an optical system.

As such, Applicants respectfully assert that the combined references fail to teach or suggest at least the slidable opaque light shield recited in claim 1, but rather teach away therefrom.

In view of the above, Applicants believe that claim 1 is in condition for allowance, and respectfully requests withdrawal of the §103(a) rejection.

Respectfully submitted,



William E. Lewis  
Attorney for Applicant(s)  
Reg. No. 39,274  
Ryan, Mason & Lewis, LLP  
90 Forest Avenue  
Locust Valley, NY 11560  
(516) 759-2946

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